



Rajasthan Public Service Commission

Assistant Engineer Examination

Geography & Natural Resources

**Comprehensive Theory with Practice questions
and Previous year solved questions**



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RPSC Assistant Engineer Examination: Geography & Natural Resources

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Preface

The compilation of this book **Geography & Natural Resources** was motivated by the desire to provide a concise book which can benefit students who are preparing for Rajasthan Public Service Commission (RPSC) Assistant Engineer Examination.



It would be worth mentioning that the entire syllabus of General Studies for RPSC Assistant Engineer Examination consists of five subjects namely Current Affairs, History & Culture, General Science, G.K. & Economic Developments with special reference to Rajasthan, and Geography & Natural Resources. The textbook of all five subjects to be launched separately. These all books will have special focus to Rajasthan which will help the aspirants immensely.

This particular textbook provides all the requirements of the students, i.e. comprehensive coverage of theory, fundamental concepts and objective type questions articulated in a lucid language. The concise presentation will help the readers grasp the theory of this subject with clarity and apply them with ease to solve objective questions quickly. This book not only covers the syllabus of RPSC Assistant Engineer Examination in a holistic manner but is also useful for other examinations conducted by RPSC. All the topics are given the emphasis they deserve so that mere reading of the book clarifies all the concepts. We have put in our sincere efforts to present detailed theory and MCQs without compromising the accuracy of answers.

Our team has made their best efforts to remove all possible errors of any kind. Nonetheless, we would highly appreciate and acknowledge if you find and share with us any printing and conceptual errors.

It is impossible to thank all the individuals who helped us, but we would like to sincerely thank all the authors, editors and reviewers for putting in their efforts to publish this book.

With Best Wishes

B. Singh

CMD, MADE EASY Group

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PART

I

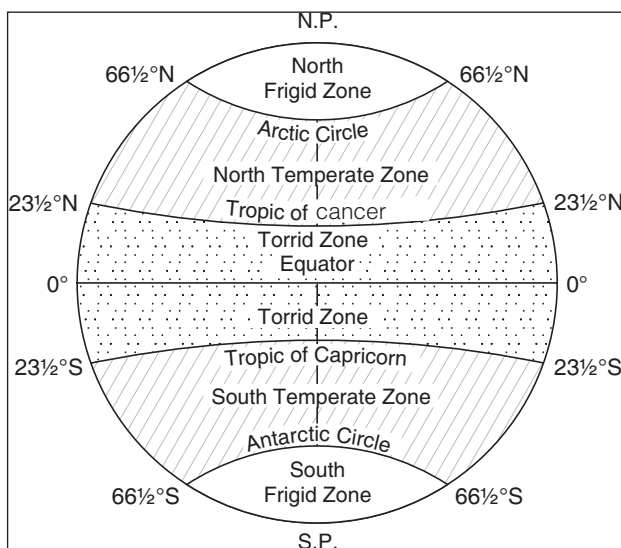
**INDIAN
GEOGRAPHY**

General Aspects of Geography

1 Chapter

Latitude

- It is the angular distance of a point on the earth's surface, measured in degrees from the centre of the earth. It varies from 0 to 90° North and 0 to 90° South.
- Latitudes are circular lines which are parallel to the equator, which lies midway between the poles. Hence, these lines are called **parallels of latitude**. The latitudes are also called as temperature coordinates because with the increase in latitudinal distance towards the poles, the temperature reduces.
- The midday sun is exactly overhead at least once a year on all latitudes in between the Tropic of Cancer and the Tropic of Capricorn. This area, therefore receives the maximum heat and is called the **Torrid Zone** (or Tropical Zone).
- The areas bounded by the Tropic of Cancer and the Arctic Circle in the northern hemisphere, and the Tropic of Capricorn and the Antarctic Circle in the southern hemisphere, have moderate temperature, hence called **Temperate Zones** (or Mild Zone).

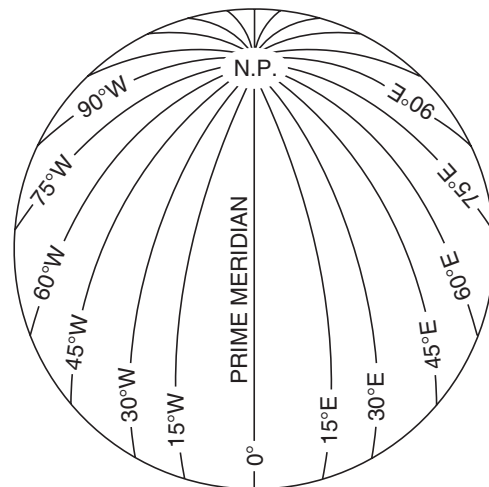


- Areas bounded by the Arctic Circle and North Pole, and the Antarctic Circle and South pole are

called **Frigid Zones**. These zones are very cold as the sun does not rise above the horizon.

Longitude

- It is an angular distance measured in degrees along the equator east or west of the Prime Meridian (0°). It varies from 0 to 180° E and 0 to 180° W. It is also called as time coordinates.
- Meridians are a series of semicircles that run from pole to pole passing through the equator.
- Longitudes are imaginary lines joining north pole with south pole.



- The Prime Meridian is at 0° and is known as the **Greenwich line** as it passes through Greenwich near London, where the British Royal Observatory is located.
- Longitudes have one very important function i.e. they determine Local Time in relation to Greenwich Mean Time (GMT).
- Maximum distance between two longitude lies over equator and minimum distance over poles, where they converge.
- In India, the longitude of 82½° E is treated as the Standard Meridian. The Local Time at meridian is taken as the Standard Time for the whole country. It is known as the **Indian Standard Time** (IST).

International Date Line

- It is an imaginary line drawn at 180° longitude, avoiding the continuous land parts.
- International Date Line passes through Arctic Ocean, Bering Strait, Pacific Ocean, Antarctica, Fiji, Tonga and other islands.
- It is also the longitude where the date changes by exactly one day when it is crossed. If a traveller crossing the date line from east to west, he loses a day and while crossing the date line from west to east, he gains a day.

Do You Know?

- The midday sun never shines overhead on any latitude beyond the Tropic of Cancer and the Tropic of Capricorn.
- 180° East and 180° West meridians are the same line which is called the **International Date Line**.
- Russia has 11 and China has 5 time zones, whereas USA and Canada both have six time zones (the Atlantic, Eastern, Central, Mountain, Newfoundland and Pacific time zones).

Motions of Earth

- The earth is a planet of the solar system. It is not static but has two types of motions:
 - Rotational Motion
 - Revolutional (or Orbital) Motion

(a) Rotation of Earth

- Rotation is a spinning of earth continuously on its own axis from west to east once in every 24 hours, causing day and night.
- Rotation is also responsible for generation of centrifugal force which is maximum over equator. This force is responsible for equatorial bulging and polar flattening.

(b) Revolution of Earth

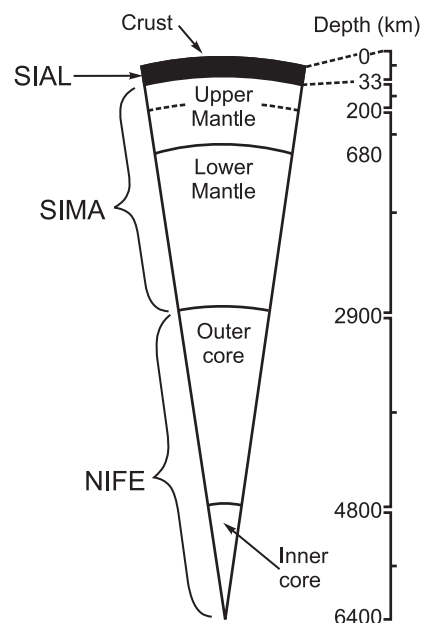
- The earth also revolves around the sun in an orbit once in about 365 days and 6 hours, causing formation of seasons and the year. This motion is called Revolution of earth (also called annual movement).

Varying lengths of Day and Night

- The axis of the earth is inclined to the plane of earth's orbit at an angle of $66\frac{1}{2}^\circ$ giving rise to different seasons and varying lengths of day & night.

- The sun is vertically overhead at the equator on 21 March and 21 September and these two days are termed as **Equinoxes** (equal length of day & night in both the hemisphere).
- On 21 June, the sun is vertically overhead at the Tropic of Cancer ($23\frac{1}{2}^\circ$ N). This is known as **summer solstice**, when the northern hemisphere will have its longest day and shortest night.
- On 22 December, the sun is vertically overhead at the Tropic of Capricorn ($23\frac{1}{2}^\circ$ S). This is known as **winter solstice**, when the southern hemisphere will have its longest day and shortest night.
- Beyond the Arctic Circle ($66\frac{1}{2}^\circ$ N) and Antarctic Circle ($66\frac{1}{2}^\circ$ S) darkness lasts for 6 months and daylight is continuous for the remaining 6 months.

Structure of Earth



- The earth as a whole has been divided into three broad zones:
 - Crust (SIAL) :** The outermost layer of earth is called as crust. It is free to drift over a layer called Asthenosphere.
 - Crust comprises two distinct parts, the upper crust or continents made up of granitic rocks (silica and aluminium). The lower crust also called ocean floor made up of basaltic rocks (silica, iron and magnesium).
 - Granitic rocks are lighter than the basaltic rocks, therefore it can be said that continents floating on the denser oceans.
 - Mantle (SIMA) :** The immediate beneath layer of crust or lithosphere is called as mantle. It is about

2400 km thick and contains most of the mass of earth. It is composed of very dense rocks rich in ferro-magnesium silicates. It is divided into two parts:

(a) **Upper Mantle** : It is about 650 km thick solid layer floats over asthenosphere. Crust and upper mantle together forms lithosphere, which makes up the earth's plate. Asthenosphere is a layer of semi molten rocks moves. It divides upper mantle to lower mantle.

(b) **Lower Mantle** : The lower mantle is solid and is about 2700 km thick. Though temperatures are higher here but the tremendous pressures keep the rock material from melting.

3. **Core (NIFE)** : It is the innermost part of the earth and it comprises of outer core and inner core.

(a) **Outer Core** : The outer core is in liquid state having thickness of 1900 km. It comprises of **molten iron** and **nickel**, formed as a result of the extremely high temperature. This liquid outer core controls the earth's magnetic field.

(b) **Inner Core**: The earth's innermost core is about 1600 km thick and is made up of **solid iron** and **nickel**. The inner core is incredibly hot, with temperature reaching about 5,500°C and is subjected to a pressure of about 4 million atmospheres. It is this extreme pressure that keeps the inner core in a solid state.

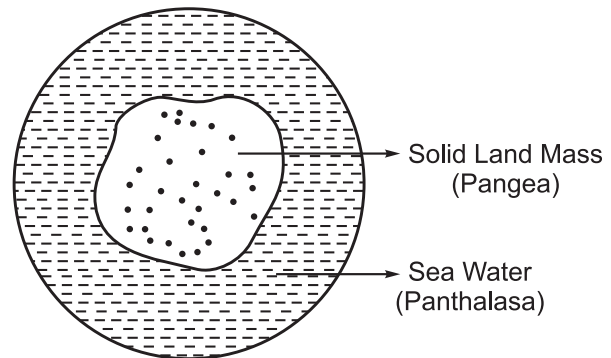
Formation of Continents

- The earth is formed around 4.5 billion (4500 million) years ago. Broadly earth is composed to oceans and continents. Around 70% part of earth surface is composed of oceans (Hydrosphere) whereas remaining 29.2% is represented by the continents (Lithosphere).
- More than 75% of the total land area of the globe is situated to the north of the equator, therefore the northern hemisphere is also known as the '**Land Hemisphere**' and the Southern hemisphere as the '**Water Hemisphere**'. It is believed that the continents are moving away from each other, Several theories have been propounded to explain this phenomenon:

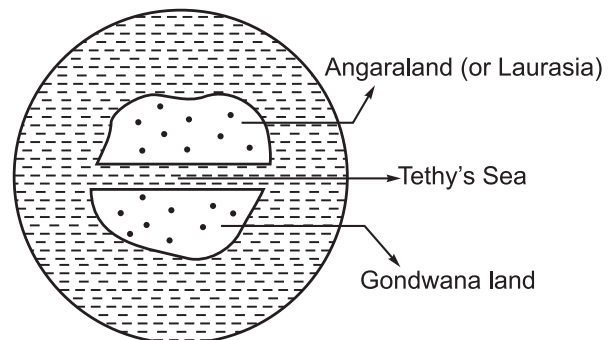
Continental Drift Theory (CDT):

- Initially F.B. Tayer gave theory of horizontal displacement of continent in 1908 to explain formation of fold mountain.
- CDT was proposed by famous German

Geographer, Prof. **Alfred Wagner** in 1924. According to this theory, before 200 million years ago, there was a single land mass surrounded by water (Panthalasa) which was named as **Pangea**.



- About 200 million years ago, pangea got cracked into two parts i.e. (a) **Angaraland** (or Laurasia) (b) **Gondwana land**, and ocean water filled in it. As a result, a narrow sea was created, known as **Tethy's Sea**.



- During further course of time, Angaraland was cracked into:
 - North American Plate
 - Eurasian Plate
 Whereas Gondwana land was cracked into 5 plates:
 - African Plate
 - South American Plate
 - Indian Plate
 - Australian Plate
 - Antarctic Plate

Earthquake

- A sudden shaking or vibration in the earth's crust is called an earthquake. According to the theory of plate tectonics, the earth's crust is divided into sections called plate, which are in constant motion, travelling independently over the semi-molten mantle of the earth and releases energy in the form of seismic waves.

- Earthquake can also be triggered by molten rock moving up into the chamber of a volcano before eruption. Most earthquake are very slight that humans cannot detect them, but the vibrations of major earthquake are catastrophically destructive.
- The place of origin of an earthquake below the surface is called the seismic focus or **Hypocentre**, which can be a few kilometers or several 100 kilometers deep. The point on the earth surface directly above focus, is called the **Epicentre**.

Types of Earthquake waves

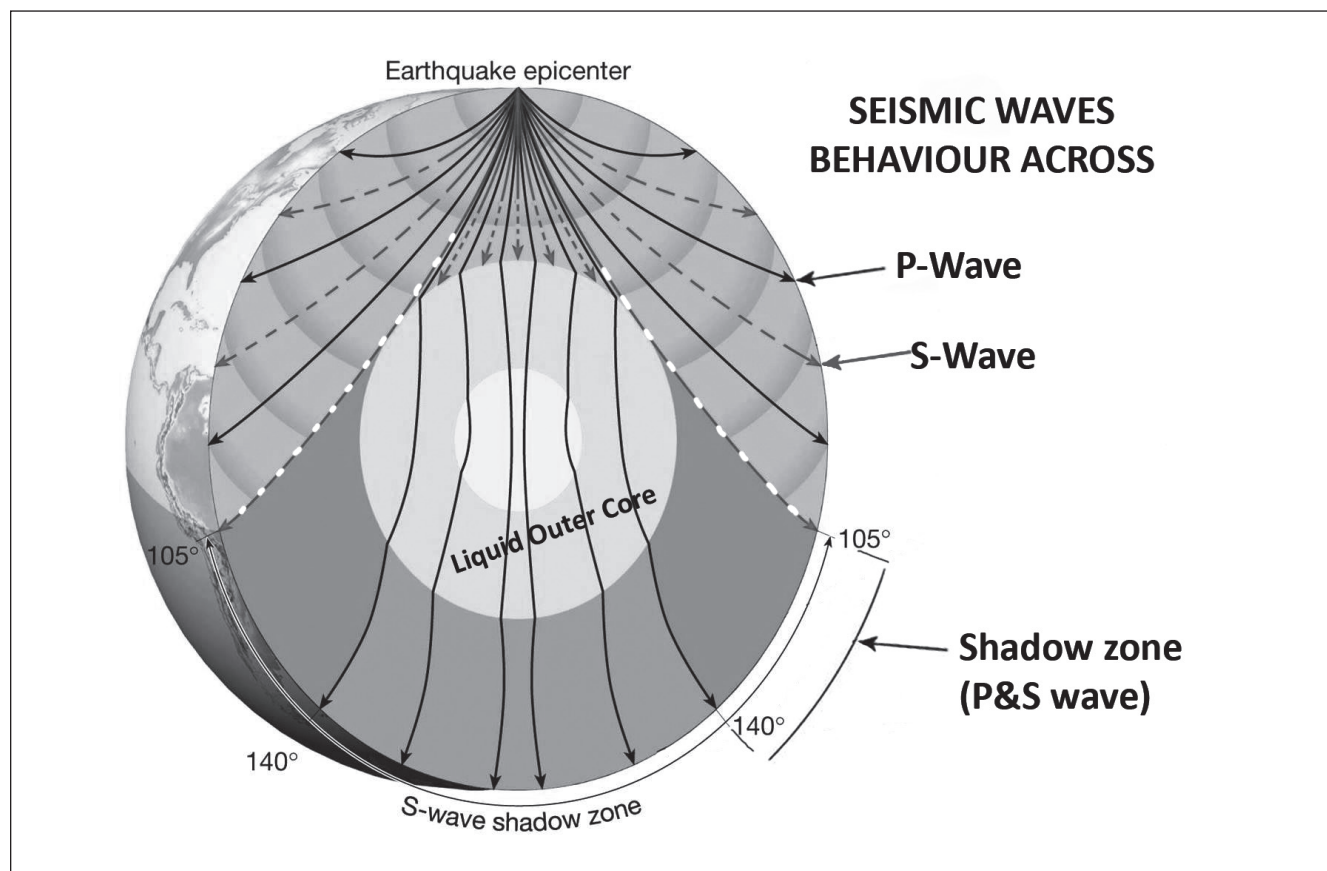
- **P-waves (Primary waves):** Particles affected by P-waves moves to and fro in the direction of propagation of waves. It is also called compressional waves. It moves fastest among all wave can travels in all solid, liquid and gaseous medium.
- **S-waves (Secondary Waves):** It is also called transverse or distortional waves. These waves are of very high frequency waves, can travel only through solid medium.
- **L-waves (Surface Waves) :** These waves have low frequency, long wavelength and transverse vibration.
- They are most destructive in nature and recorded last on the seismograph.

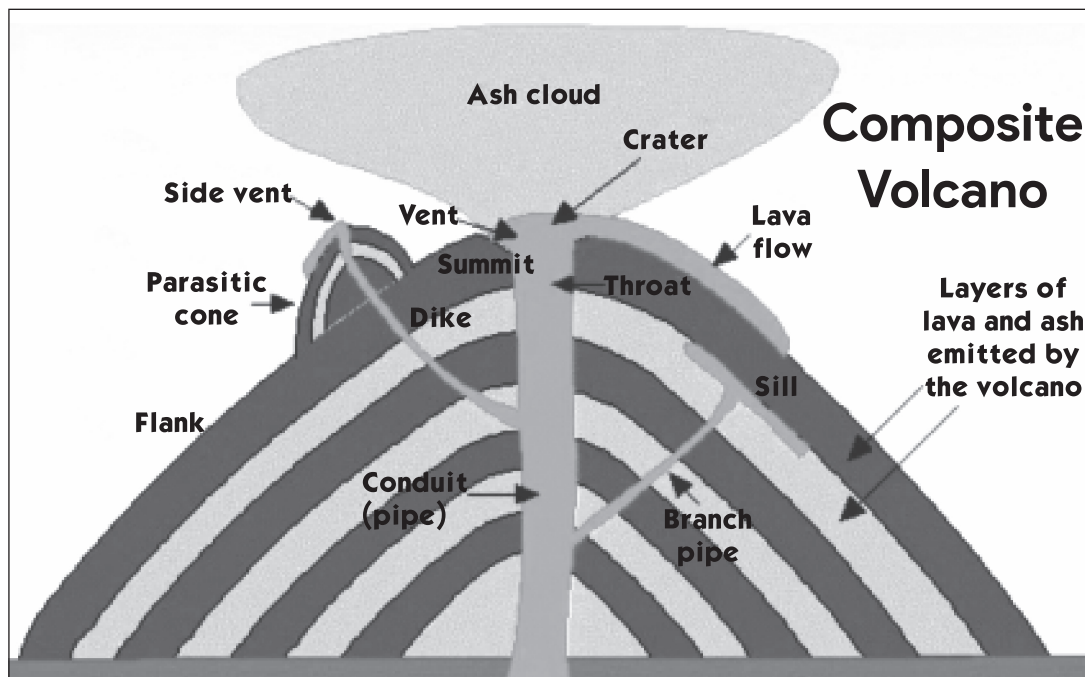
Note:

- **Isoseist line** joins places at which earthquake arrival time is same from **epicentre**, whereas isoseismal line joins places having some intensity of earthquake.
- **Mohorovics** was the first who gave information about interior structure of earth on the basis of seismological evidences.
- Magnitude of earthquake (energy released) measured by **Richter scale** whereas intensity is measured by **Mercalli scale**.

Volcanoes

- A volcano is a sudden opening in the crust of the earth, caused by the earth's interior movements. A volcanic mountain forms when molten rock material from earth's mantle forces its way through the crust and accumulates like a cone to form volcanic ridges and mountain.
- This hot molten rock material appearing at the surface of a volcano is called **lava** (under the earth surface it is known as magma). It contains hot gases, water vapour, ash and small stones. Volcanoes usually form near hot spots within the earth's crust or at the marginal area of tectonic plates.





There are several types of volcanoes like:

- (i) **Effusive volcanoes:** Volcanoes that erupt without any noise.
- (ii) **Explosive volcanoes:** Explode with a lot of noise.
- (iii) **Active volcanoes:** Volcanoes that continuously send out lava (like Barren Island in Andaman and Nicobar Islands, Mt. Etna in Sicily).
- (iv) **Dormant volcanoes:** It has long periods of quiet between two successive eruptions and are potentially dangerous (for e.g. Narcondum in Andaman and Nicobar Islands, Mt. St. Helens in USA and Pinatubo in Philippines).
- (v) **Extinct volcanoes:** Volcanoes that have ceased all activities (like Mt. Kilimanjaro).

Note:

Composition of Atmosphere

- | | |
|-----------------------|-----------------------------|
| (i) Nitrogen — 78% | (ii) Oxygen — 21% |
| (iii) Argon — 0.93% | (iv) Carbon dioxide - 0.03% |
| (v) Neon — 0.0018% | (vi) Helium — 0.0005% |
| (vii) Ozone — 0.0006% | (viii) Hydrogen — 0.00005% |

- **Tsunami:** 'Tsu-na-mi' is a Japanese word which means **oncoming oceanic waves**. These waves are very long and with less oscillation which originate in the oceans due to earthquake that occur on the ocean-bed. From the Tsunami point of view, **Pacific ocean** is in the most dangerous position.
- In October 2007, India installed the most advanced **Tsunami Warning System** at **Hyderabad**.
- Volcanic island in ocean are known as 'Nuclei of Future continents'.



PART

III

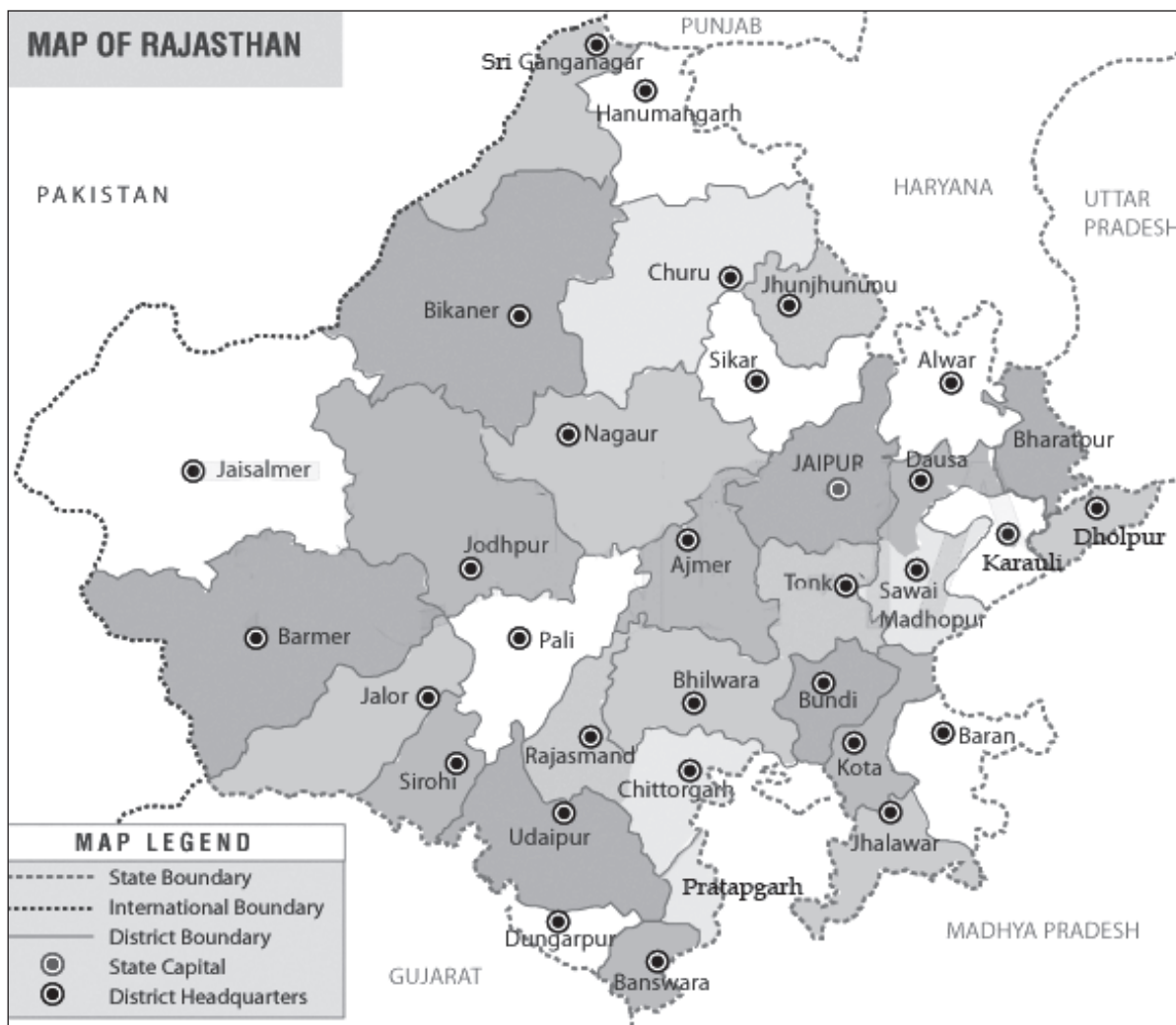
**GEOGRAPHY OF
RAJASTHAN**

1

Chapter

- The state of Rajasthan is situated in the north-west region of India from 23°3' northern latitude to 30°12' northern latitude and from 69°30' eastern longitude to eastern longitude 78°17'.
- **Neighbouring states of Rajasthan**

North	:	Punjab, Haryana
North-East	:	Haryana
South	:	Gujarat, Madhya Pradesh
East	:	Uttar Pradesh
South-East	:	Madhya Pradesh



Important facts of Rajasthan		
1	Total border of Rajasthan	5920 km
2	Rajasthan touches International border with	Pakistan (Redcliff line) : 1070 km
3	Districts touching international border	Shriganganagar (210 km), Bikanar (168 km), Jaisalmer (464 km), Barmer (228 km).
4	Starting point of international border from north	Hindualmulk (Sriganganagar)
5	Last point of international border	Bakhasar Village Shahgarh (Barmer)
6	Area-wise biggest district of Rajasthan	Jaisalmer (38401 sq. km)
7	Area-wise smallest district of Rajasthan	Dholpur (3033 sq. km)
8	Districts through which line of cancer passes	Bansawara, Dungarpur
9	Number of divisions in Rajasthan	6 [Jaipur, Jodhpur, Kota, Udaipur, Ajmer, Bikaner, Bharatpur]
10	Highest peak of Rajasthan	Guru-shikhar (1722 mt.)
11	Hottest place of state (maximum)	Palodhi (Jodhpur)
12	Maximum humidity / maximum day of rains / District with highest rainfall	Jhalawar
13	District with minimum rainfall	Jaisalmer
14	River flows in Rajasthan only	Banas River
15	Important means of irrigation	Well Irrigation
16	Main canal project in Rajasthan	Indira Gandhi Canal Project
17	Longest lift canal of Indira Gandhi Canal Project	Kanwar Sen lift canal
18	State animal of Rajasthan	Chinkara, Antelope [Scientific Name : Gajela-Gajela], Camel
19	State bird of Rajasthan	Godawan / Great Indian Bustard/ Sohan Chidiya / Chhukua, Gughanmer, Maal Mordi [Scientific Name : Koriatis Naigisep]
20	State tree of Rajasthan	Khejdi [Scientific Name : Prosopis Scenaria] (Pride of Rajasthan)
21	State flower of Rajasthan	Rohida [Scientific Name : Tikkomela Undoleta]
22	Khajuraho of Rajasthan	Kiraadu (Barmer)
23	Tharmopally of Rajasthan	Haldi Ghati (Rajsamand)
24	Vellor of Rajasthan	Bhainsrodgarh (Chittorgarh)
25	Industrial city of Rajasthan/ Kanpur of Rajasthan/ Nalanda city of Rajasthan/ City of Garden	Kota
26	Sun City / City of forts	Jodhpur

Important facts of Rajasthan		
27	Nagpur of Rajasthan	Jhalawar
28	Manchester (Textile) city of Rajasthan	Bhilwara
29	Granary of Rajasthan	Sri Ganganagar
30	City of 144 Pillars	Ranakpur (Pali)
31	Zibraltor of Rajasthan	Taragarh (Ajmer)
32	Zinc city / Lake city of Rajasthan/ Veins of Rajasthan / Kashmir of Rajasthan	Udaipur
33	Emerald / Jems / Paris of East / Pink City	Jaipur
34	City of Mountain	Dungarpur
35	City of step wells	Bundi
36	Haweli city / Golden city / City of steel / A&N of Rajasthan	Jaisalmer
37	Entrance gate of Rajasthan	Bharatpur
38	Scotland / Lion gate of Rajasthan	Alwar
39	Metal city	Nagaur
40	Son of Himalayan / Shimla of Rajasthan	Mount Abu (Sirohi)
41	Haridwar of Rajasthan	Matrikundia (Chittorgarh)
42	Bhuvneshwar of Rajasthan	Osian (Jodhpur)
43	Tajmahal of Rajasthan	Jaswant Thada (Jodhpur)
44	Golden city / Granite city of Rajasthan	Jalore
45	Ellora of Rajasthan	Kholve Caves (Jhalawar)
46	Water Pot of Thaar	Chandan (Jaisalmer)
47	Varah City	Baran City
48	Rati Ghati / House of Wool	Bikaner
49	District which shares boundary with highest no. of districts in Rajasthan	Pali (9 no. of districts)

PART **IV**

**ECOLOGY AND
WILDLIFE OF INDIA**

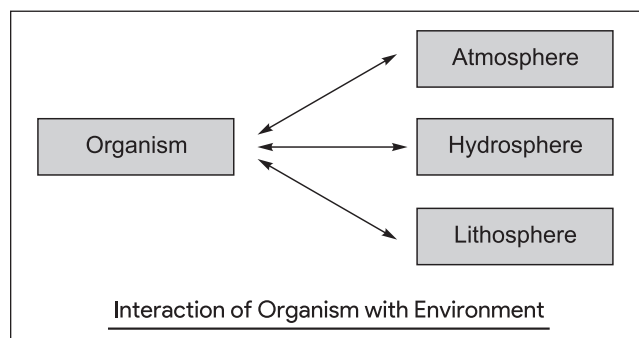
Basics of Ecology

1

Chapter

Introduction

- The word 'Ecology' is derived from Greek word "*Oikos*" which means habitation and "*logos*" means study.
- Ecology was first described as a separate field of knowledge in 1866 by German zoologist Ernst Haeckel.
- Ecology is a science which studies the interaction of flora and fauna among themselves on one hand and interaction of flora and fauna as a whole to their environment on the other hand. Under ecology, the study of three features of ecosystem is done:
 - (i) Interaction of organism as a whole with their physical environment.
 - (ii) Interaction among members of different species.
 - (iii) Interaction among members of a particular species.



Important Terms related to Ecology

Individual

An **individual** is one type of an organism often referred to as one type of species. Example, The Tiger (*Panthera tigris*) is a type of an individual organism, The Royal

Bengal Tiger (*Panthera tigris tigris*) is a species of tiger among others like the sumatran tiger (*Panthera tigris sumatrae*) etc.

Individuals make the basic unit of study in ecology. The individuals of the similar type have the potential for interbreeding, and produce new individuals.

Population

Population is a group of individuals belonging to the same species found in a particular geographical area within limiting time.

Community

The group of individual populations living in a same area is referred to as a community. These individuals interact with one of the same species as well as with the other species.

1. **Major Communities:** Tropical evergreen forests.
2. **Minor Communities:** A mat of lichen on a cow dung pad.


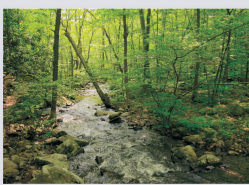
Ecosystem


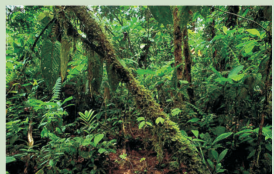

Ecosystem may be defined as a community of many other communities. Here the individuals in each community interact not just with each other, but also with the abiotic components of the system such as the air, water and soil.

Biome

Biomes are very large ecological units characterised by a major vegetation type and associated fauna found in a specific climate zone. No two biomes are alike. A **Biome** is NOT an ecosystem, but it can be seen as a one form of massive ecosystem.

The climatic factors like rain and temperature determines the boundaries and abundance of organisms. Some types of Biomes are Tundra, Taiga, Temperate deciduous forest, Tropical rain forest, Savannah, Grassland, Desert.

Biome: Other Name(s)	Type of Climate, Growing Season, Soil Quality	Biodiversity, Common Plants, Common Animals	
Tundra: Arctic tundra (high altitudes) Alpine tundra (high altitudes)	<i>Type of climate:</i> arctic, arid <i>Growing season:</i> very short <i>Soil quality:</i> Very poor	 <p>Alpine tundra in the Alps Mountains or Switzerland in Europe</p>  <p>Arctic tundra on the northern coast of Alaska in the United States</p> <p><i>Biodiversity:</i> very low <i>Plants:</i> mosses, grasses, and lichens; few herbaceous plants; no trees <i>Animals:</i> insects; birds (summer only); no amphibians or reptiles; mammals such as rodents, arctic hares, arctic foxes, polar bears; caribou (summer only); mountain goats and chinchillas (alpine tundra only)</p>	
Boreal Forest: Taiga Northern conifer forest	<i>Climate:</i> subarctic, semi-arid <i>Growing season:</i> short <i>Soil quality:</i> Poor	<i>Biodiversity:</i> low <i>Plants:</i> conifers such as cedar, spruce, pine, and fir; mosses and lichens <i>Animals:</i> insects; birds (mainly in summer); no amphibians or reptiles; mammals such as rodents, rabbits, minks, raccoons, bears, and moose; caribou (winter only)	 <p>Boreal forest in central (inland) Alaska, United States</p>
Temperate Deciduous Forest: Temperate hardwood forest Temperate broadleaf forest	<i>Climate:</i> temperate, semi-humid <i>Growing season:</i> medium <i>Soil quality:</i> good <i>Climate:</i> temperate, semi-humid <i>Growing season:</i> medium <i>Soil quality:</i> excellent	 <p>Temperate deciduous forest in Pennsylvania, eastern United States</p>  <p>Temperate grassland in Nebraska midwestern United States</p> <p><i>Biodiversity:</i> high <i>Plants:</i> broadleaf deciduous trees such as beech, maple, oak, and hickory; ferns, mosses, and shrubs; many herbaceous plants <i>Animals:</i> insects, amphibians, reptiles, and birds; mammals such as mice, chipmunks, squirrels, raccoons, foxes, deer, black bears, bobcats, and wolves</p> <p><i>Biodiversity:</i> medium-high <i>Plants:</i> grasses, other herbaceous plants; no trees <i>Animals:</i> invertebrates such as worms and insects; amphibians, reptiles, and birds; mammals such as mice, prairie dogs, rabbits, foxes, wolves, coyotes, bison, and antelope, kangaroo (only in Australia)</p>	
Chaparral Mediterranean scrub forest	<i>Climate:</i> temperate, semi-arid <i>Growing season:</i> medium <i>Soil quality:</i> poor	<i>Biodiversity:</i> low-medium <i>Plants:</i> shrubs and small trees such as scrub oak and scrub pine <i>Animals:</i> insects, reptiles, and birds; mammals such as rodents and deer	 <p>Chaparral in southern California, United States</p>

Desert	<i>Climate:</i> temperate or tropical, arid <i>Growing season:</i> varies <i>Soil quality:</i> very poor	<i>Biodiversity:</i> none-low <i>Plants:</i> plants, adapted to dryness, such as cacti, sage-brush, and mesquite; virtually no plants if extremely arid <i>Animals:</i> insects, reptiles, and birds; mammals such as rodents and coyotes	 <p>Desert in southern California, United States</p>
Tropical Rainforest	<i>Climate:</i> tropical humid <i>Growing season:</i> year-round <i>Soil quality:</i> excellent	<i>Biodiversity:</i> very high <i>Plants:</i> tall flowering, broadleaf evergreen trees; vines and epiphytes; few plants on forest floor <i>Animals:</i> insects, amphibians, reptiles, and birds; mammals such as monkeys, sloths, leopards, jaguars, pigs, and tigers	 <p>Tropical rainforest in Ecuador, South America</p>
Tropical Grassland Savanna	<i>Climate:</i> tropical semi-arid <i>Growing season:</i> year-round <i>Soil quality:</i> poor	<i>Biodiversity:</i> low-medium <i>Plants:</i> grasses; scattered clumps of trees <i>Animals:</i> insects, reptiles, and birds; mammals such as zebras, giraffes, antelopes, lions, cheetahs, and hyenas	 <p>Elephant browsing on the leaves of an acacia tree in savanna in Kenya, eastern Africa</p>

Biogeographic Regions in India

India has ten biogeographic zones with each zone having different characteristic climate, soil and biodiversity. These are:

- **Trans-Himalayas:** The Trans-Himalayas is an extension to the Tibetan plateau. This region comprises of the high-altitude cold desert in Ladakh (Jammu and Kashmir) and Lahaul-Spiti (Himachal Pradesh).
- **Himalayas:** The Himalayas are the northern boundaries of India. The entire mountain chain is running from Kashmir in the North-west to Assam in the north-east. The Himalayas comprise of a diverse range of biotic provinces and biomes.
- **Western Ghats:** The Western Ghats are a mountain range that runs along the western coast of India. They are a range extending north-south from southern tip of Gujarat in the north to Kanyakumari in the south. This section covers an extremely diverse range of biotic provinces and biomes.
- **Gangetic plain:** This plain covers the area between the south Himalayas to the Tropic of Cancer. These plains were formed by the Ganges river-system and are relatively homogeneous. Sunderbans forests are located in this region.
- **Desert:** The desert of western Rajasthan, Gujarat and the high-altitude cold desert of Jammu and Kashmir and Himachal Pradesh are the kinds of deserts found in India.
- **Deccan Peninsula:** It is a large triangular plateau south of the Narmada valley. It is the one of largest zones covering the southern and south-central plateau with mostly deciduous trees.
- **Semi-arid:** This zone lies between the desert and the Deccan plateau. It includes the Aravalli hill range.
- **North-east India:** These are non-Himalayan regions of north-eastern India and have a wide variety of vegetation.
- **Coasts:** India has a large coastline distributed both to the east and west with distinct differences between the two.
- **Islands:** The Andaman and Nicobar Islands in the Bay of Bengal and Lakshadweep Islands in the Arabian Sea have wide variety of ecosystems.

